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Published in:
Community Dentistry and Oral Epidemiology

DOI:
10.1111/cdoe.12190

Publication date:
2016

Document Version
Peer reviewed version

Exploring the oral health experiences of homeless people: a deconstruction-reconstruction formulation

Running head: Homelessness and oral health

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Key words: oral health, homelessness, grounded theory

Abstract

Objective: To explore qualitatively, using a grounded theory approach, homeless people's awareness of their oral health needs and how they access dental services using a deconstruction-reconstruction formulation, and provide recommendations for service designers and dental professionals who work with people experiencing homelessness.

Methods: A qualitative study using grounded theory methodology was conducted. A purposive sample of homeless people was recruited from health facilities and organisations serving homeless populations in four Scottish cities and towns. Participants were interviewed about their oral health within the wider context of their experiences of homelessness. Initial research questions were open and focused on social processes such as oral health practices and interaction with dental services. Data collection and analysis were carried out simultaneously and iteratively, with emerging findings informing subsequent cycles. Data analysis was guided by Glaser and Strauss's grounded theory methodology and involved constant comparison, coding of transcripts and detailed memo-writing.

Results: Thirty-four homeless people took part. Participant experiences were conceptualised as a journey into and through the stages of homelessness, towards 'reclaiming life'. Oral health experiences were mapped as a parallel 3-stage journey from the deconstruction of self-care, to the construction and maintenance of the neglected dentine, and finally to the reclamation of oral health resulting in a reconstructed functioning dentition.

Conclusions: This qualitative exploration using a deconstruction-reconstruction formulation has added to the understanding of homeless people's oral health awareness and dental treatment access while permitting an examination of the wider socio-economic and psychosocial issues that disrupt their intentions to attend for treatment. These findings provide service designers and dental professionals with recommendations for the provision of responsive, acceptable and appropriate dental health services for those experiencing homelessness.

Introduction

In recent years, Scotland has strengthened its policies aimed at tackling homelessness (1-5) with oral health as an integral part of the Scottish Government's overarching homelessness policy. In 2005 (6) and later in 2010 (7), the Scottish Government stated that health boards were to develop and implement oral health care programmes for those experiencing homelessness, since like those elsewhere, homeless people in Scotland had a high prevalence of carious and missing teeth, periodontal disease and unmet dental treatment need (8-15). This increased prevalence was associated with reduced accessibility and an apparent dependency upon emergency rather than routine dental services (9,11).

The reason for homeless people's poor oral health has been based within a lexicon of dental treatment services, at the exclusion of the underlying psychosocial and socio-economic causes (16, 17) that result in homelessness. Thus, we contend that an equivalence exists between the observed exclusion from routine dental goods and services and with the withdrawal of homeless individuals from their social networks and society. Thinking in this way permits the proposition to be made that the socio-economic (17) and psychosocial (18) factors that promoted homelessness are observable within the oral health care experiences of homeless people (19). To understand how homeless people experience their oral health, there is a need to think more holistically, to consider homelessness as a socio-economic and psychosocial disruption within the life course, and by doing so place the mouth back into the body and place the individual in the society in which they live.

This proposed theoretical position is counter to that of Nettleton's (20). She proposed that the mouth should be considered as separate and thereby distinguished from the rest of the body (20). However, we disagree with the universality of this position, rather we suggest that the mouth is a central component of the mind-body continuum (21). Therefore disruptions within psychosocial health will emerge as physical (oral) symptoms and discomforts. Support for this supposition is found in the work of Bury (22), who suggests that psychosocial difficulties emerge when 'disruptive events' occur as a consequence of chronic illness. Could the oral health condition of homeless people be conceptualised as a chronic illness in which current life disruptions have led to a 'withdrawal from . . . social interaction under the impact of the symptoms' and so 'attention to bodily states are not brought into consciousness'? (22)

Homelessness is a dynamic process (23), with multiple pathways in and out of homelessness, a multitude of homelessness experiences, and a variety of ways that individuals negotiate their way around and through their homelessness journeys. Coles' (24) qualitative exploration of homelessness found that homelessness journeys were underpinned by a trajectory, which defined people's expeditions into, through and out of homelessness. The journey started with a departure from social interactions, triggered by current life difficulties and was conceptualised as 'deconstruction'. Deconstruction, in time, was followed by the 'construction' of a new homelessness identity, which acted to protect the remaining parts of the personality from further destabilisation-disintegration from macro (societal) and micro-structural (self) forces (25). The final part of the journey was 'reconstruction' and reintegration as people 'reclaimed life' (24).

We suggest, therefore, that an analogous situation exists for the oral health of homeless people. This is reflected in the chronicity of their homelessness oral state, and in this sense oral health is equivalent to the chronic illness states that Bury (22) proposes. We perceive that poor oral health experience is a reflection of being homeless with its psychological, socio-economic and physical disruptions, however, given that the reclamation of good oral health emerged as an integral part of the process of moving out of homelessness and re-integrating with mainstream society, we propose that oral status is an integral part of 'reclaiming life' (24). How homeless people bring their oral health needs 'to consciousness' (22) and socially interact by accessing dental services (24) is therefore, of central importance for service designers and dental professionals. To address how homeless people, bring their oral health needs and priorities back 'to consciousness' (22) we need to unpack and understand what is meant by the concept of 'consciousness'. Following a Kantianism theoretical position, we adopt the view that a unity of consciousness exists, in which the individual has a perception of not just one experience and thought but many experiences and thoughts at the same time, and that some of these experiences and thoughts will be retained, while others are lost to consciousness, however, when life circumstances permit, the experience and thought will be returned to consciousness (26). Adopting a Kantianism stance, we therefore suggest, that Bury's (22) view that 'attention to bodily states are not brought into consciousness' for those experiencing chronic illness, means that their awareness of health has been temporarily lost to consciousness. When conditions permit their bodily awareness returns as a reflection of improved mindfulness and health status. Therefore we contend that consciousness of oral health mirrors that proposed by Bury (22). Thus when oral health needs and priorities return to consciousness individuals, in

their comments, show that they are conscious or aware of their many oral health problems and are able to identify solutions, barriers and prioritise their oral health requirements. For the purposes of this qualitative exploration, we conceptualise consciousness as awareness, which is under the cosh of current life circumstances, resulting in the loss of previous oral health knowledge and experience, which are gradually retrieved when circumstances permit and when homeless people start to enter a phase of reconstruction.

We propose, therefore, that the deconstruction-reconstruction trajectory could be used as a formulation to explore how homeless people experience oral health with the concept of consciousness conceptualised as awareness. Therefore the aim of this qualitative exploration was to examine, using a grounded theory approach, homeless people's awareness of their oral health needs ('bring to consciousness') and how they access dental services ('social interaction') using a deconstruction-reconstruction formulation and to provide recommendations for service designers and dental professionals who work with people experiencing homelessness.

Methods

Sample and recruitment

The qualitative exploration was conducted in four cities/towns in Scotland, each in a different NHS Board area. Purposive sampling was used to recruit homeless participants from NHS service providers, such as dental surgeries and health clinics, and homelessness charitable organisations. These locations were visited by prior arrangement. Homeless people were invited to take part in one-to-one semi-structured interviews.

Inclusion criteria were based on the Houseless and Roofless categories from the European Typology of Homelessness and Housing Exclusion (ETHOS) (27), a fairly broad categorization inclusive of many types of homelessness, such as rough sleepers, those living in temporary accommodation, or 'sofa-surfers' (people staying with friends or relatives on a short-term basis). However, self-definition or 'subjectively-defined homelessness' (28) was also used as part of the inclusion criteria. Consequently, if someone defined or identified themselves as homeless, they were eligible to be invited to participate. This self-definition method has been previously used and was shown to be a reliable and valid method means of assessing homelessness status (29). Finally, and thus enhancing maximum variation sampling,

if an individual was identified as homeless by a staff member or another homeless person familiar to them, they were invited to participate.

Ethical considerations

Ethical approval was obtained from the Research Ethics Committee at the University of Dundee (UREC 9005). Ethical approval from an NHS Research Ethics Committee was not required as the study formed part of a wider project which was categorized by the Integrated Research Application System (IRAS) as a service evaluation. Participation in the study was voluntary, and confidentiality was protected. Information sheets and consent forms were provided; consent was sought from all participants prior to being interviewed. Data were anonymised.

Grounded theory

The study was guided by grounded theory principles (30, 31). Grounded theory studies begin with relatively open research questions and assume no prior knowledge of the subject area (in this case, homelessness and oral health). Data collection and analysis are conducted simultaneously. Using grounded theory methodology permitted an exploration of the main concern(s) of homeless people in relation to their oral health and how these concerns are managed or resolved, and allowed findings to emerge that were 'grounded' in the data.

Interview procedure

Interviews lasted up to 60 minutes. The majority of the interviews were digitally audio recorded and transcribed; written notes were taken during interviews where audio recordings were impossible for practical reasons, such as in noisy street settings. Initially the interviews focused on the problems and perceived barriers that homeless people felt affected their ability to achieve and maintain good oral health and access to oral health services. Oral health was used as a vehicle to (i) open the discussion and work towards gaining the interviewee's trust, (ii) gain insight into the homeless person's perspective, and finally (iii) broaden the focus of the discussion to a wider range of potential topics as instigated by the interviewee. Initial interview topics raised by participants in relation to oral health included: access to dental services, dental anxiety, appearance of mouth and teeth, and the impact of reduced oral health status on confidence, self-esteem and general well-being. Other general health and psychosocial factors were explored as and when they arose at the instigation of interviewees. If and when appropriate points in the interview arose, participants were asked to reflect on the factors that

led up to them becoming homeless, their general experiences of being homeless and their hopes for the future.

In keeping with grounded theory principles, where themes emerging from the data guide the nature and direction of the data collection phase (30, 31), the later interviews did not focus as strongly on oral health issues. Although oral health still featured, the later interviews tended to be more biographical in nature, with participants placing emphasis on their emotional journey through their experiences of homelessness. This reflected a gradual shift during the research period from what the authors considered to be the public face of homelessness to the private experiences of homeless participants. This shift was made possible by the simultaneous data collection and analysis permitted by grounded theory. The interview process was designed to gain an in-depth understanding of each participant's private, individual experiences of homelessness whilst focusing on their oral health as the means to gain this understanding. An interview schedule of questions focused on oral health was initially developed; this was modified and additional items added iteratively as interviews progressed, in order to clarify and test emerging themes. Recruitment of participants and ensuing interviews continued until data saturation was reached after 34 interviews. Data saturation occurs when no new themes emerge from subsequent interviews.

Data analysis

Data analysis began during the data collection and fieldwork stage, when handwritten notes were typed up, and recorded interviews played back, in order to facilitate immersion in the data. Following grounded theory principles (30, 31), initial findings were used to guide and inform the on-going data collection. The grounded theory techniques of open and selective coding were used to identify the 'main concerns' of participants and understand how they resolved or managed these main concerns (Table 2).

Results

Thirty-four homeless people aged between 16 and 70 took part in one-to-one interviews (Table 1). Twenty-one were men.

Oral health and homelessness: a deconstruction–reconstruction formulation

The maintenance of a functioning dentition is reliant upon the preservation of tooth structure. The carious process is said to be, 'dynamic and can be controlled so that early lesions do not

progress or established lesions can be arrested' (32), however, when enamel demineralisation exceeds mineralisation and attempts at repair have failed, then, the enamel disintegrates, giving way to cavitation and the deconstruction of the tooth. As the decay invades the dentine, the odontoblasts are stimulated to produce reparative or secondary dentine – a dentine of a different character, identity and role. The construction of secondary dentine is an attempt to stabilise the carious process and the creation of a barrier to protect the pulp. Returning to the deconstruction-reconstruction formulation, the loss of tooth structure could be thought of as analogous to deconstruction, and the formation of secondary dentine as analogous to construction. Following on from this biological analogy, we propose that the deconstruction of the dentition, the construction or shoring-up of the dentition and its final reconstruction, in whatever form, represents another homelessness journey – a journey from the 'loss from consciousness' or awareness of dental routines, through a period of 'quick fixes' to solve or stabilise acute dental problems, to a time when oral health returns to consciousness and becomes an important element of reintegration. Thinking in this way, we propose that the deconstruction-reconstruction formulation provides a framework to explore homelessness and oral health.

Stage 1. Oral health deconstruction

The phase of deconstruction was characterised by loss - loss of awareness, loss of mindfulness and loss of social interactions - which gave way to disengaging, detaching and ultimately social isolation. Whether consciously or unconsciously determined, the effect of the loss was observed as disruptions in day-to-day living, as old routines were gradually replaced by newer habits. The loss and decline of self-care routines reflected a shift from awareness to unawareness and 'a lack of attention to [*deteriorating*] bodily states' (22). Oral health deconstruction, therefore, mirrored that of deconstruction proper. Oral health deconstruction was signalled by loss and disruption of routine as previous oral health practices were disinvested and replaced by different behaviours. With the resulting fall in awareness or a reduced mindfulness the oral health deconstruction process started with a deterioration of the oral health state.

Of central importance during the initial phases of oral health deconstruction was the disruption in oral health routines – for people 'on the streets', maintaining basic oral hygiene was a challenging process, and so people spoke of their difficulties in toothbrushing while living in such 'pre-carious' conditions:

"It was difficult then, because there was nowhere to go to brush your teeth in the morning...I did try to brush my teeth as often as I could, but when you're sleeping rough, it's quite hard" (M, 24).

Others spoke of disrupted eating patterns, of lost mealtimes being replaced with snacking on sugary foods and drinks. For injecting drug users, the routine quest for drugs disrupted oral health routines. The following quote illustrates Bury's view that with changing circumstances there was a corresponding 'lack of attention to [*oral health*] states' (22):

"All I was interested in was getting my drugs, that was my main priority, teeth were the last thing I ever thought about, until I got toothache...when I was eating, bits of them were breaking off, so the ones I had left were getting really bad, I just didn't care whether I had them or not" (M, 35).

At the time of the interviews, although many had been, few people attended for regular/routine dental care. As with routine toothbrushing and regular mealtimes, there were physical and practical problems, which made it difficult for homeless people to attend for dental treatment. The most frequently mentioned issues, were associated with loss - the loss of a permanent address, the loss of knowing how to arrange *("I don't know how to go about it"*: F2, 17) and/or how to pay for dental treatment:

"The financial implications of going to the dentist, I wasn't sure what they were, I didn't take the time to find out…I didn't know which dentists were NHS" (M, 36).

Oral health deconstruction was thus characterised by physical, cognitive and psychosocial disruptions, observed as the loss of oral health routines, loss of socio-economic rules and a loss of social capital (33). Returning to the question of volition and control – to what degree was the loss of mindfulness, health awareness and disinvestment of oral health routines under voluntary control? Pascale (17) points to the revisionist nature of characterising homelessness as 'a free choice'. She states that the effect of doing so is to push the responsibility from government socio-economic policy to the psychosocial difficulties people experience when they become homeless. We suggest that the ability to think, act and make conscious oral health-care decisions was compromised under the sway of the physical and psychosocial impacts of the homelessness state. Thinking in this way is reminiscent of Bury (22) and the 'withdrawal from . . . social interaction under the impact of the symptoms' – for oral health deconstruction, withdrawal 'was under the impact of the symptoms' of homelessness.

Stage 2. Oral health construction: the neglected dentition

The stage of construction permitted the creation and maintenance of a new identity. Adopting Giddens' (25) theoretical position, we propose the constructed homeless identity was a compromise formation, fashioned from the influence of the homeless person's present psychosocial functioning and the remains of the pre-homeless self on the one hand and the constraints of society on the other. The homelessness identity, therefore, symbolized a form of 'homeostasis' between the disruptions and losses of the deconstruction phase and attempts at stabilisation in the construction phase. Construction, thus, represented a shifting and tentative balance, which was under attack from socio-economic constraints and current life circumstances but strengthened by the forging of different social rules and the building of homelessness social networks.

The phase of oral heath construction reflected the idiolect of construction within the deconstruction-reconstruction formulation. The compromise between the remnants of pre-homelessness oral health priorities with current lifestyle priorities *('finding accommodation'*) against dental practice payment rules *('fines for missed appointments'*) and regulations is illustrative. Whether due to regulated (methadone programme) or illegal (injecting heroin) opiate use, increased pain thresholds, or competing survival priorities, participants described a lack of need for dental treatment. The following 'on-going [dental] story' (25) is provided by way of example. It should be noted that despite toothache and 'inflamed' gums, the need for dental treatment was still beyond this man's grasp:

> *"I would get a bit of toothache but would just live with it...my teeth were probably pretty brown, because of smoking and general lifestyle choices, I was getting a lot of intermittent pain. It wasn't enough to make me go though, I would just live with it"* (M, 36).

> *"I may still be registered there…I just stopped using the dentist. My mouth's getting into a state of disrepair…there's damage around the gums, I have gum inflammation, I need several fillings. But they didn't get into too bad a state of disrepair as I am quite good at brushing them"* (M, 36).

> *"My chaotic lifestyle…I just don't go to the dentist or make an appointment you know…I honestly I've just stopped going, isn't a priority"* (M, 36).

When oral pain became unbearable, people spoke of attending for emergency treatment. It seemed that their excruciating physical pain brought oral health back to consciousness, as in Bury's (22) terminology. At such times, people spoke of the need to find treatment quickly, to get the pain fixed and to have their tooth out quickly, it seemed that with improved awareness they had chosen this management strategy for their dental problem. Within the action of accessing emergency dental care, oral health construction emerged as delaying treatment, attending in unbearable dental pain, and requesting tooth extractions. Oral health construction, therefore, had the character of a 'quick fix':

> *"I had toothache for day and days, and it took me about four days to say right, I'm going to the dental hospital. They had holes in them, and the holes were that big, they we could fill them if you want but I says no, just take them out, I just want them out, so they took them out"* (M, 25).

Construction has been conceptualised as a balance between destabilisation and stabilisation – a shaky and tentative balance often resulting in less stabilisation in the face of disruptive influences encountered during the homelessness journey. This was reflected in oral health construction as a lack of awareness of pain or discomfort, which resulted in a delay in accessing dental treatment. Attendance for dental treatment could only happen once the pain had reached such an intensity to permit oral health to attain a level of consciousness. The effect of the delay caused a breakdown of tooth substance, extraction of the painful tooth and an overall destabilisation of the dentition. We hypothesise, however, that stabilisation in oral health construction had special character explicitly associated with curing, or stabilising, dental pain and in this respect reflected the paradoxical nature of oral health behaviours during this phase. Therefore the typology of oral health construction was a lack of awareness of the oral health state, a set of dental rules composed of a conglomerate of pre-homelessness and current accurate and inaccurate knowledge as well as treatment experiences that resulted in delays accessing dental treatment until the unbearable pain of toothache brought oral health back to consciousness (22, 26).

Oscillation: from oral health construction to oral health reconstruction

As the homeless journey progressed, people's oral health stories took on a different character. From these 'on-going [dental] stories' (25) it seemed that a shift in the balance between destabilisation and stabilisation had occurred, with the scales tipping towards stabilisation, as evidenced by a return of their intention to attend for routine dental care. Many participants spoke of a wish to attend on a regular basis and to take care of their remaining teeth. One man, for instance, spoke of making dental appointments, yet he was unable to maintain his resolve by remembering to attend:

> *"I booked an appointment for the Tuesday, I missed my appointment, I was five minutes late, so I got another appointment for the following Tuesday which is tomorrow – no, today, missed it again, quarter to two I was meant to be there, I'm going to have to go to another dentist, I was meant to be there today at quarter to two, I'm thinking this was Monday, but it's Tuesday"* (M, 25).

Some spoke of their intention to attend for a complete course of treatment, but experienced difficulties in finalising a dental appointment time while for others the wish to attend was dashed by dangerous encounters experienced in day-to-day homelessness living:

> *"I got dentures and then I got attacked in town, and they were all smashed up. I made an appointment with the dentist again, I had an appointment for the Tuesday but I got sent to jail on the Sunday"* (M, 35).

These observations allowed another category of oral health construction to emerge as 'oscillating'. Oscillation represented the shifting balance between immediate pain relief and the wish for a functioning dentition. Oscillation therefore reflected the beginning of a process in which oral health started to attain a level of consciousness. The following example is illustrative: for this woman, the pain gave her little option but to attend for the extraction of her teeth. However, what initially appeared to be short-term dental treatment gain appeared to represent a tentative move from construction to reconstruction as she entered into a rehabilitation programme to reclaim life:

> *"I was still detoxing when I had to go to the dentist and have those extracted, so before I'd consciously thought about it I was sitting in the dentists saying take these teeth out, I'm in agony; they're total broke and infected … and then when the pain was gone, it was like get clean, that was my priority"* (F, 43).

The fragility of this mindfulness, nevertheless, was easily affected by socio-economic factors, fears of stigmatisation and humiliation. Any 'disruptive event' could shift the balance from oral health reconstruction back to oral health construction and the consolidation of a neglected dentition. Difficulties that influenced the intention to attend scheduled treatment appointments included competing life events such as organising accommodation, meeting with social workers (psychosocial factors), managing financial matters and/or paying fines for missed appointments (economic factors):

> *"I'll have a fine because I missed my appointment. It was about two months ago...I can't afford to pay it, I'm on benefits and I only get £47 a week... it's just I really have to pay this fine...it's hard to find a dentist"* (F1, 17).

Oscillation, perhaps more than any other part of the homeless person's oral health journey reflected Rousseau et al's (18) notion of psychosocial disruptions and Pascale's (17) view that socio-economic factors were important elements in the homelessness experience. Following on from these (17,18) theoretical positions, we propose that the effect of socio-economic and psychosocial factors upon people's tenuous oral health awareness meant that any distraction could result in a resistence to attend. This is reminiscent of Gibson's et al's (34) conceptualisation of the dental examination as a checking cycle and their suggestion that dental attendance was subjected to 'pressures within the particpants' lifestyles'. Therefore for people experiencing homelessness, socio-economic and psychosocial 'pressures' had an increased potential to disrupt their resolve and reduce their confidence to enter into a new phase of their homeless journey and with it the reconstruction of their oral health.

Stage 3. Oral Health Reconstruction

Reconstruction proper emerged as homeless people reached a point in their journey when they felt able and finally ready to 'move on'. Whether due to increase awareness or a change in mindfulness and/or improved confidence, the behaviours associated with reconstruction were: recasting identity, looking outwards, re-engaging with past and/or new social networks and disengaging from the homeless world and its culture(s). For Bury (22) this would be a return to inclusion and a reinstatement of previous social interactions and relationships, where so-called 'normal rules' replace the constructed rules of homelessness. Thinking in this way, we suggest that reconstruction represented a move from homelessness with its difficulties and dangers to a more settled time with the mobilisation of accessible knowledge, resources and

structures including the development of mutually trusting networks. Reconstruction was thus reminiscent of social capital and social inclusion (33, 35).

Oral health reconstruction was heralded by the re-adoption of routine oral health behaviours, including attending for routine dental treatments, and the re-establishment of mutually trusting networks with dental professionals. These behaviours suggested that oral health had returned to consciousness, however, with the return of oral health awareness came regret. People spoke of their sadness concerning previous hasty treatment decisions, of their '*broken and damaged teeth*' and their understanding of the importance of their dental health as they re-engaged and re-adopted the 'normal rules of reciprocity and mutual support' (22) within the dental arena.

The choice of dentist and dental practice was, therefore, of central importance as trusting social networks were cautiously re-established. This was particularly true for those who were dentally anxious or who feared being stigmatised or as one woman stated: *"*[the dentist here] *doesn't look at you as if you're a drug addict"* (F, 32). Therefore as oral health reconstruction materialised, many people spoke of their preference to find and remain with dedicated dental practices for homelessness, where they felt accepted and understood. This point is further illustrated by the following vignette, from a man who lived in temporary accommodation and had attended a dedicated dental service for homeless patients for a year:

> *"It wasn't until I became homeless, which is when I started to address a lot of other life issues, that I started even thinking about getting a dentist…when I found out about the homeless dentist, it was just really easy. I'm a lot happier about the appearance of my teeth since I've had the treatment. I'm really grateful for the service, glad to have found it"* (M, 36).

As oral health deconstruction was associated with loss and decline of self-care routines and a shift from awareness to unawareness and 'a lack of attention to [*deteriorating*] bodily states' (22), oral health reconstruction was associated with an awareness of oral health, a re-engagement with dental services, the reinstatement of dental health behaviours, and an attention to any deterioration of the teeth, mouth and/or dentures which could affect the maintenance of oral health. Hence oral health reconstruction was a central component of reclaiming a life as 'attention to [*oral health*] was brought back to consciousness' (22).

Discussion

The aim of this qualitative exploration was to examine homeless people's awareness of their oral health needs ('bring to consciousness') and how they accessed dental services ('social interaction') using a deconstruction-reconstruction formulation, and thus provide recommendations for service designers and dental professionals who work with people experiencing homelessness. It seemed that for those experiencing homelessness, their oral health could be explained by the deconstruction-reconstruction formulation. The concept of 'biographical disruption' (18, 22) when applied to oral health (18) is relevant here. Bury's (22) original concept of everyday life disrupted by chronic illness was applied to oral health by Rousseau et al (18) who found that the meaning ascribed by individuals to their oral health issues, such as tooth loss, had a profound effect on the self, leading to disrupted lives and disrupted identities. We propose that psychosocial factors and socio-economic factors (16-18) are also of central importance in understanding the disruptive events, as theorised by Bury (22) and Rousseau et al (18). Our theoretical position however, while incorporating that of Rousseau et al (18) marries the macro and micro structural dimensions (25) within the trajectory to understand the processes which enable or inhibit homeless people's ability to access dental services. In this sense we have attempted to provide an additional psychosocial and socio-economic perspective to understand homelessness and oral health.

The paradoxical nature of oral health behaviours is of particular interest. In the construction phase, actions that could be perceived as more destabilising, such as emergency extractions, had positive or stabilising effects in the form of immediate pain relief. Thus such actions were helpful to the individual in the short-term allowing the participants to regain a sense of control over their lives (36). Yet these actions often led to later regret: the quick-fix effect of emergency extractions during the construction stage, for example, provided an easy solution and freedom from pain, yet the long-term effects of many missing teeth resulted in difficulty eating, or embarrassment about appearance. An alternative explanation, to the paradoxical nature of oral health behaviours, in the oral health construction, oscillation and reconstruction stages may be proposed. In these stages, it may be postulated that when the individual has made the decision to have the tooth extracted as opposed to having it filled, (s)he is aware or conscious of her many problems and has identified a solution which incorporates current life priorities with an acknowledgement of potential future difficulties. Thinking in this way is reminiscent of risk-benefit models in which the person has acknowledged of current difficulties, assessed the risks and benefits, recognized and evaluated the options, implement the plan and its subsequent evaluation. The basis of this model, however, according to Siegrist

et al (37), is that the individual is able to assess the level of risk and benefit, which includes such factors as, 'knowledge, uncertainty, voluntariness, newness, catastrophic potential and control over risk'. Moreover, these theorists (37) have postulated that social trust is a vital element of risk-benefit perception and so people with less trust may perceive interventions as having fewer benefits and greater hazards. Therefore the paradoxical nature of oral health behaviours for homeless people, could be conceptualised within a risk-benefit model, however, this model would be in a form, which would be heavily contextualised by the homelessness experience and influenced, in particular, by reduced social trust.

The question as to the generalizability of this work for people on low income may be raised here since they too experience equivalent socio-economic pressures regarding accessing routine dental care. Giddens (38) would view the homelessness oral health state as an important step in understanding the oral health state of people with low income. He states that 'critical situations', such as homelessness, provide a 'radically disturbed' setting from which 'a good deal of learning about day-to-day situations in routine settings' (p.123) may be made. We postulate that people on low incomes, for whom socio-economic pressures cause equivalent disruptive events in their day-to-day living, could enter into an oral health journey containing many of the characteristics of the oral health deconstruction-reconstruction trajectory. Consequently, this exploration provides information for the design of dental services for those who not only experience homelessness but for those who experience low income/poverty. It is recommended that responsive dental services can only be achieved when there is an acknowledgment of the role of socio-economic factors and the behavioural consequences this has for those accessing dental services – be that in relation to oral health awareness, maintaining oral health knowledge or fears of the costs of treatment. This work has shown that the effect of homelessness is to reduce oral health awareness with the consequence of pain-only attendance. These findings add to our knowledge of the ways in which people engage with dental health services. We would contend that an appreciation of the stage that people are on their oral health 'journey' allows service designers and dental professionals to direct their attention and tailor resources to the expressed dental treatment needs of the individual that are commensurate and appropriate for the individual at that point in time. Knowledge of the deconstruction to reconstruction trajectory can be utilised by practitioners to recognise the stage that homeless individuals are at, identify points in time for engagement, and tailor preventive and/or restorative interventions to the individual and the point where he/she is on their homelessness journey is of central importance. We would maintain that without a close

examination of the individual within the society they live, the responsibility for poor oral health and delays in attending for dental treatment will remain with the individual rather than with socio-economic policy (17).

There are some limitations of this work. The findings are based on subjective accounts of homelessness experiences in Scotland; however the same key features emerged repeatedly during the interviews - and thus data saturation was achieved. Further, although only a certain group of homeless people took part – some who were actively engaged with health, social care or other homelessness services – the sample was, nonetheless, representative of the Scottish homeless population (11, 39).

Despite these limitations, the deconstruction-reconstruction formulation allowed an exploration of homelessness and oral health and permitted an examination of the wider socio-economic and psychosocial issues as factors that disrupt people's oral health priorities and intentions to attend for dental treatment. Therefore to conceptualise the effects of homelessness and poverty within a rubric of socio-economic and psychosocial factors is to understand how disruptions in people's lives affect their oral health awareness, priorities and ability to access dental services. Doing so will assist service designers and dental professionals to provide acceptable and appropriate dental services and assist in reducing health inequality for those with the greatest need.

Acknowledgements

This work was supported by the Scottish Government Health Department [grant number 121.804497]. The views and opinions expressed in this article do not necessarily reflect those of the SGHD.

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Table 1: Characteristics of participants (n=34)

Location & number of sites	**Number of participants**	**Participant characteristics**	**Gender**
City 1 4 sites	18	Homeless dental patients. Homeless people accessing homeless health services. Homeless people accessing a homeless charity support service. *Big Issue* magazine street vendors.	M = 13 F = 5
City 2 2 sites	9	Homeless dental patients. Homeless people accessing homeless health services. *Big Issue* magazine street vendors.	M = 6 F = 3
City 3 1 site	2	Homeless people in temporary hostel accommodation.	M = 2
City 4 1 site	5	Homeless young people in temporary accommodation.	F = 5

Table 2: Example of open coding taken from excerpt of an interview transcript

J: I'm on a detention and training order through the court and one of the social workers in there told me about the homeless dental surgery, so...now that I'm not using anymore, it's time to get my teeth back...when I was mad with it I just didn't care whether I had them or not	*Practitioner support* *Reaching a turning point, taking back control/responsibility* *Drug talk, neglect, not caring*
EC: Did you have them taken out before?	
J: yes, they were pretty bad, I went to the dentist and asked her to take them all out, what I had left, I only had about 5 left anyway [...] for what I had left there wasn't much point in keeping them...I had toothache, I thought I'll get them all out and that'll be... I wish I'd never done it	*Pro-active (negatively)* *Rationalising, justifying* *Resignation* *Quick fix, easy option, regret*
J: yes, when they told me about this, I'd stopped using, you know...and I just started thinking, when I was in town talking to people, I was talking, hiding my mouth, getting embarrassed again... it's really annoying now when I go into town or meet anybody I've not seen for ages, I'm standing talking and I'm kidding on I'm scratching my nose to cover my mouth...when I was mad with [...] I just didn't care about what anybody thought, but I do now. So I phoned up here for an appointment...I wasn't sure whether they'd give me another set, 'cos I thought maybe they'd tell me to go back to my old dentist, but nah, they've been alright, they've been quite good, definitely...I wish I'd looked after my teeth now...I realise that, same as everything...aye it makes a big difference having them, yes, it really does, even just the couple of seconds I've had them *[dentures]* in, it makes you feel better, it really does	*Realization, self-awareness* *Embarrassment* *Perceptions of J by others* *Hiding* *Drug talk, self-awareness* *Pro-active (positively)* *Anticipating rejection* *Regret* *Realization, awareness* *Improved self-esteem*
EC: Do you think if you'd have more support or more information about looking after your teeth, or if you'd had access to a dentist, it would have made a difference?	
J: I don't think it'd have made a difference to the way I finished up, with drugs and all that, no matter what was there, I wouldn't have gone to it, so...I could have done with a bit of information yes, but as I say I didn't really...I don't think it'd have made a difference, all I was interested in was getting my drugs, that was my main priority, teeth were the last thing I ever thought about, until I got toothache...when I was eating, bits of them were breaking off, so the ones I had left were getting really bad	*Inevitability* *Drug talk* *Drugs as main/only priority* *Neglect* *Physical disintegration, slow decay (of self, body and teeth)*

Table 1: Characteristics of participants (n=34)

Table 2: Example of open coding taken from excerpt of an interview transcript